REMARKS

Claims 1-16 have been rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by FR 2794825 to Peugeot. This rejection is respectfully traversed.

The present invention is directed to a method and apparatus for determining wear of composite material brake disks, including the steps of determining an instantaneous wear contribution of the brake disks during deceleration on the basis of the value of the energy dissipated by the brake disks during deceleration and on the basis of the determined estimation temperature of the brake disks during deceleration.

The wear of composite material brake disks has been found to be dependent both on the energy dissipated by the brake disks and on the operating temperature of the brake disks, i.e. on the way in which energy is dissipated. In other words, the same amount of dissipated energy produces a different amount of wear on the braking area depending on whether it is dissipated during extreme use of a vehicle (typically on-track use) in which the brake disks reach high temperatures of over 400°-500°C, or during normal use (typically use on public highways). More specifically, the same amount of dissipated energy produces much greater wear of the braking area during extreme, as opposed to normal use of the vehicle.

The French reference, FR 2794825 to Peugeot, relates to a method of preventing excessive wear of motor vehicle brake linings, that is, brake pads, and does not relate to determining the wear of brake disks, made of composite material. In this connection, it is important to point out that braking pads exhibit a linear life span and thus gradually reduce their performance with usage, whereas, on the

contrary, brake disks made of composite material do not exhibit a gradual reduction in performance based on use but rather more or less maintain the same performance level until they fail, suddenly losing all their braking capability. Thus, based upon the performance records of the respective types of braking devices, that is, brake linings versus brake disks made of composite material, it cannot be expected that the problems associated with brake linings or pads and the solutions therefore, could be analogized to the problems and solutions associated with brake disks. For this reason alone, one skilled in the art would not be led to the teachings of the French patent in an attempt to solve the problems solved by the present invention.

Furthermore, the French patent does not disclose the determination of the instantaneous wear contribution based on a combination of both the value of energy dissipated during deceleration and also on the basis of the determined estimated temperature of the brake disks during deceleration. At best, the French patent may suggest determining an instant wear contribution on the basis of the value of energy dissipated during deceleration but certainly does not suggest energy dissipated on the basis of a determination of the estimation of temperature of the brake disks during deceleration. Accordingly, it is believed that the French patent fails to anticipate the Applicant's inventive contribution. Furthermore, Peugeot 2794825 does not render the present invention as defined by the claims of the present application obvious under 35 U.S.C. § 103 because the French patent fails to establish a *prima facie* case of obviousness inasmuch as there is no suggestion in

the reference concerning the determination of an instantaneous wear contribution based on the estimation of temperature of the brake disks during deceleration.

Accordingly, in view of the above amendments and remarks, reconsideration of the rejection and allowance of claims 1-3 and 5-16 are respectfully requested.

Entry of the above amendments is respectfully requested. An early and favorable first action on the merits is earnestly solicited.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: Substitute Specification